

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF GRAYSON)	CASE NO.
COUNTY WATER DISTRICT FOR A RATE)	2021-00191
ADJUSTMENT PURSUANT TO 807 KAR 5:076)	

NOTICE OF FILING OF COMMISSION STAFF REPORT

Notice is hereby given that, in accordance with the Commission's Order of July 15, 2021, the attached report containing the findings of Commission Staff regarding the Applicant's proposed rate adjustment has been filed in the record of the above-styled proceeding. Pursuant to the Commission's July 15, 2021 Order, Grayson County Water District is required to file written comments regarding the findings of Commission Staff no later than 14 days from the date of this report. The Commission directs Grayson District to the Commission's July 22, 2021 Order in Case No. 2020-00085¹ regarding filings with the Commission.



Linda C. Bridwell, PE
Executive Director
Public Service Commission
P.O. Box 615
Frankfort, KY 40602

DATED OCT 06 2021

cc: Parties of Record

¹ Case No. 2020-00085, *Electronic Emergency Docket Related to the Novel Coronavirus COVID-19* (Ky. PSC July 22, 2021), Order (in which the Commission ordered that for case filings made on and after March 16, 2020, filers are NOT required to file the original physical copies of the filings required by 807 KAR 5:001, Section 8).

STAFF REPORT
ON
GRAYSON COUNTY WATER DISTRICT
CASE NO. 2021-00191

Grayson County Water District (Grayson District) is a water utility organized pursuant to KRS Chapter 74 that owns and operates a water distribution system through which it provides retail water service to approximately 6,606 residential customers, and 309 commercial customers, that reside in Grayson County, Kentucky.² On July 6, 2021, Grayson District filed an application with the Commission requesting to adjust its water rates pursuant to 807 KAR 5:076. The application was filed pursuant to the Commission's Order in Case No. 2021-00152.³ To ensure the orderly review of the application, the Commission established a procedural schedule by Order dated July 15, 2021. Commission Staff (Staff) issued its first round of formal discovery on August 2, 2021.

The Commission notes that in its 2020 Annual Report Grayson District reported a water loss of 7.86 percent.⁴ Commission regulation 807 KAR 5:066(6)(3) states that for rate making purposes a utility's water loss shall not exceed 15 percent of total water produced and purchased, excluding water consumed by a utility in its own operations.

² *Annual Report of Grayson County Water District to the Public Service Commission for the Calendar Year Ended December 31, 2020* (Annual Report) at 12 and 49.

³ 2021-00152, *Electronic Application of Grayson County Water District for a Certificate of Public Convenience and Necessity to Construct a System Improvements Project and an Order Authorizing the Issuance of Securities Pursuant to KRS 278.023*, (Ky. PSC April 29, 2021), at 5, ordering paragraph 12.

⁴ Annual Report at 57.

At a 7.86 percent water loss, the annual cost to Grayson District is \$47,346.⁵

To comply with the requirements of 807 KAR 5:076, Section 9,⁶ Grayson District used the calendar year ended December 31, 2020, as the basis for its application. Using its pro forma test-year operations, Grayson District determined that a revenue increase of \$190,523 or 5.23 percent over test-year normalized revenues of \$3,516,060 was warranted.⁷ The revised rates requested by Grayson District would increase the residential monthly bill of a typical residential customer using 3,234 gallons per month by \$1.84 from \$35.08 to \$36.92 or approximately 5.24 percent.

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	Purchased Water	Purchased Power	Chemicals
Purchased Water from 2020 Annual Report	\$ 418,616	\$ 130,865	\$ 52,374
Times: Water loss Above 15 Percent	7.8666%	7.8666%	7.8666%
 Excess Water Loss Reductions	 \$ 32,931	 \$ 10,295	 \$ 4,120
 Total			 \$ 47,346

⁶ The reasonableness of the proposed rates shall be determined using a 12-month historical test period, adjusted for known and measureable changes, that coincides with the reporting period of the applicant's annual report for the immediate past year.

⁷ Application, Exhibit D, Revenue Requirements Calculation.

	<u>Grayson County Water District</u>
Pro Forma Operating Expenses	\$ 3,299,270
Plus: Average Annual Principal and Interest Payment	633,058
Debt Coverage Requirement	<u>126,612</u>
Total Revenue Requirement	4,058,940
Less: Revenues Required to serve Caneyville	(138,913)
Other Operating Revenue	(121,252)
Non-Operating Revenue	(66,627)
Interest Income	<u>(25,565)</u>
Revenue Required From Water Sales	3,706,583
Revenue from Retail Sales at Present Rates	<u>(3,516,060)</u>
Required Revenue Increase	<u>190,523</u>
Percentage Increase	<u>5.23%</u>

To determine the reasonableness of the rates requested by Grayson District, Staff performed a limited financial review of Grayson District's test-year operations. The scope of Staff's review was limited to determining whether operations reported for the test year were representative of normal operations. Known and measurable⁸ changes to test-year operations were identified and adjustments made when their effects were deemed material. Insignificant and immaterial discrepancies were not necessarily pursued or addressed.

⁸ Commission regulation 807 KAR 5:076, Section 9 sets the standard for the determination of the reasonableness of proposed rates and states, in pertinent part, that the test period shall be "adjusted for known and measurable changes." See also Case No. 2001-00211, *The Application of Hardin County Water District No. 1 for (1) Issuance of Certificate of Public Convenience and Necessity; (2) Authorization to Borrow Funds and to Issue its Evidence of Indebtedness therefor; (3) Authority to Adjust Rates; and (4) Approval to Revise and Adjust Tariff* (Ky. PSC Mar. 1, 2002); Case No. 2002-00105, *Application of Northern Kentucky Water District for (A) an Adjustment of Rates; (B) a Certificate of Public Convenience and Necessity for Improvements to Water Facilities if Necessary; and (C) Issuance of Bonds* (Ky. PSC June 25, 2003); Case No. 2017-00417, *Electronic Proposed Adjustment of the Wholesale Water Service Rates of Lebanon Water Works* (Ky. PSC July 12, 2018).

Staff's findings are summarized in this report. William Foley reviewed the calculation of Grayson District's Overall Revenue Requirement. Jason Green reviewed Grayson District's reported revenues and rate design.

SUMMARY OF FINDINGS

1. Overall Revenue Requirement and Required Revenue Increase. By applying the Debt Service Coverage (DSC) method, as generally accepted by the Commission, Staff found that Grayson District's required revenue from rates is \$3,836,149 to meet the Overall Revenue Requirement of \$4,125,405, and that a \$191,337 revenue increase, or 5.25 percent, to pro forma present rate revenues is necessary to generate the Overall Revenue Requirement.

2. Monthly Water Service Rates. Based upon the revised revenue requirement, Grayson District proposed to increase all of its monthly retail water service rates evenly across the board by approximately 5.23 percent. Grayson District did not perform a cost of service study (COSS). In response to Staff's First Request for Information (Staff's First Request), Grayson District stated that it did not complete a COSS at this time, as there has not been any material change in the water system to warrant a COSS.⁹

The Commission has previously found that the allocation of a revenue adjustment evenly across the board to a utility's rate design is appropriate when there has been no evidence entered into the record demonstrating that this method is unreasonable and in the absence of a COSS. Finding no such evidence in this case, Staff followed the method

⁹ Grayson District's Response to Staff's First Request (filed Aug. 13, 2021), Item 8.

proposed by Grayson District and allocated the \$191,338 revenue increase across the board to Grayson District's monthly retail and wholesale water service rates.

The rates set forth in the Appendix A to this report are based upon the revenue requirement, as calculated by Staff, and will produce sufficient revenues from water sales to recover the \$3,836,149 Revenue Required from Water Sales, an approximate 5.25 percent increase. These rates will increase a typical residential customer's monthly water bill from \$35.08 to \$36.93, an increase of \$1.85 or approximately 5.27 percent.¹⁰

3. Nonrecurring Charges. Staff has reviewed Grayson District's Nonrecurring Charges. In its recent decisions,¹¹ the Commission has found that when district personnel are currently paid during normal business hours, estimated labor costs previously included in determining the amount of Nonrecurring Charges should be eliminated from the charges. In response to Staff's First Request, Grayson District provided updated cost justification information for the Nonrecurring Charges that are listed in its tariff.¹² Staff reviewed the cost justification information provided by Grayson District and have adjusted these charges by removing Field Labor Costs and Office/Clerical Labor Costs.¹³ Staff adjusted the mileage rate to the current allowable

¹⁰ The typical residential customer uses approximately 3,234 gallons per month.

¹¹ Case No. 2020-00141, *Electronic Application of Hyden-Leslie County Water District for an Alternative Rate Adjustment* (Ky. PSC Nov. 6, 2020), Case No. 2020-00167, *Electronic Application of Ohio County Water District for an Alternative Rate Adjustment* (Ky. PSC Dec. 3, 2020), Case No. 2020-00196, *Electronic Application of West Daviess County Water District for an Alternative Rate Adjustment* (Ky. PSC Dec. 30, 2020), and Case No. 2020-00195, *Electronic Application of Southeast Daviess County Water District for an Alternative Rate Adjustment* (Ky. PSC Dec. 30, 2020).

¹² Grayson District's Response to Staff's First Request, Item 7.

¹³ *Id.*

mileage rate by the Internal Revenue Service of \$0.56 per mile.¹⁴ Such adjustments result in the following revised Nonrecurring Charges:

Nonrecurring Charge	Charge	After Hours Charge
Connection Fee	\$ 15.00	
Turn-On Charge/Trip Fee	15.00	\$ 113.00
Meter Re-Read Charge	15.00	113.00
Meter Test Charge	15.00	
Reconnect Fee	30.00	170.00
Service Call/ Investigation	15.00	113.00
Service Line Investigation	15.00	
Meter Tampering	60.00	
Return Check Fee	10.00	

The adjustments to the Nonrecurring Charges results in a decrease in Other Operating Revenue of \$42,270 as shown below.

Charges	Number of Occurrences	Utility Pro Forma	Adjustment	Staff Pro Forma
Connection Fee	770	\$ 46,200	\$ (34,650)	\$ 11,550
Trip Fee	75	4,500	(3,375)	1,125
After Hours Trip	14	1,890	(765)	1,125
Meter Tampering	1	60	-	60
Return Check Fee	28	700	(420)	280
Reconnect Fee	36	4,140	(3,060)	1,080
After Hours Reconnect	-	-	-	-
Totals		\$ 57,490	\$ (42,270)	\$ 15,220

¹⁴ <https://www.irs.gov/tax-professionals/standard-mileage-rates>.

PRO FORMA OPERATING STATEMENT

Grayson District's Pro Forma Operating Statement for the test year ended
December 31, 2020, as determined by Staff, appears below.

	Test Year	Adjustment	(Ref.)	Pro Forma
Operating Revenues				
Metered Sales	\$ 3,347,731	\$ 168,329	(A)	\$ 3,516,060
Sales for Resale	130,716	(1,964)	(B)	128,752
Total Sales of Water	3,478,447	166,365		3,644,812
Other Water Revenues				
Forfeited Discounts	8,778	44,674	(C)	53,452
Misc. Service Revenues	57,490	(42,270)	(D)	15,220
Rents from Water Property	66,627	(360)	(E)	66,267
Total Operating Revenues	3,611,342	168,409		3,779,751
Operating Expenses				
Operation and Maintenance Expenses				
Salaries and Wages - Employees	941,731.00	(10,387)	(F)	
Salaries and Wages - Officers	30,000	-		30,000
Employee Pensions and Benefits	326,895	2,130	(H)	
Purchased Water	418,616.00	(9,395)	(J)	275,564
Purchased Power	130,865.00	8,961	(J)	139,826
Chemicals	52,374.00	4,619	(K)	56,993
Materials and Supplies	190,907			190,907
Contractual Services	233,034			233,034
Rental of Bldg./Real Property				-
Transportation Expenses	40,337			40,337
Insurance	79,234			79,234
Advertising				-
Commission Expense				-
Bad Debt	16,568			16,568
Miscellaneous Expense	91,210			91,210
Total Operation and Maintenance Expenses	2,551,771	(132,647)		2,419,124
Depreciation	859,101	(55,113)	(K)	
Amortization		575	(F)	804,563
Taxes Other Than Income	90,916	(2,665)	(L)	
Total Operating Expenses	3,501,788	(189,319)	(M)	3,312,469
Net Operating Income	109,554	357,728		467,282
Interest Income	25,565			25,565
Nonutility Income	279,067			279,067
Income Available to Service Debt	414,186	357,728		771,914

(A) Billing Analysis. Grayson District provided a billing analysis listing the water usage and water sales revenue for the 12-month test year in its application. The total metered water sales revenue reported for the test year is \$3,347,731.¹⁵ During the test year Grayson District applied for and received approval for a Certificate of Public Convenience and Necessity and increased service rates pursuant to KRS 278.023.¹⁶ Grayson District used the billing analysis to calculate a normalized revenue amount based on the usage during the test year using the rates authorized in the final Order for that case. Subsequently, Grayson District increased test year water sales revenue by \$168,329 to reflect the increase in rates. Staff agrees with Grayson District's proposed revenue adjustment.

(B) Sales for Resale. Due to a decrease in the rate charged to the city of Caneyville effective August 13, 2020, Grayson District adjusted its wholesale sales to the city of Caneyville during the test period by \$1,964.¹⁷ Staff agrees with Grayson District's proposed adjustment to water sales for resale.

(C) Other Water Revenues- Forfeited Discounts. In its application, Grayson District proposed to increase Forfeited Discount Revenues by \$44,674¹⁸ to account for the moratorium regarding the collection of late payment fees from March through December 2020 due to the COVID-19 pandemic. For this adjustment, Grayson District

¹⁵ Annual Report at 49, Total Metered Sales \$3,271,134 + Sales to Irrigation Customers \$76,597 = \$3,347,731.

¹⁶ Case No. 2021-00152, *Electronic Application of Grayson County Water District For a Certificate of Public Convenience and Necessity to Construct a System Improvements Project and an Order Authorizing the Issuance of Securities Pursuant to KRS 278.023* (Ky. PSC Apr. 29, 2021).

¹⁷ TFS 2020-00356.

¹⁸ Application, Exhibit C, Statement of Adjusted Operations, Adjustment C.

calculated the average of the Forfeited Discounts for the years 2017, 2018, and 2019. Staff agrees with Grayson District's decision to average past year's late payment fees to provide a more accurate estimation for the test year Forfeited Discounts. Therefore, Staff increased Forfeited Discounts Revenue by \$44,674.

Year	Forfeited Discounts
2017	\$ 57,605
2018	53,741
2019	<u>49,010</u>
Average Collected	53,452
Forfeited Discounts Test Year	<u>(8,778)</u>
Forfeited Discounts Adjustment	<u><u>\$ 44,674</u></u>

(D) Miscellaneous Service Revenues-Nonrecurring Charges. As shown above, the adjustments to the Nonrecurring Charges results in a decrease in Other Operating Revenue of \$42,270.

(E) Rents form Water Property. In its application, Grayson District reported Test Year Rents from Water Property Revenues of \$66,627.¹⁹ Examining Grayson District's test year adjusted trial balance, Grayson District recorded a balance of \$66,267 for account #8.0502 Rent Income. Staff decreased Rent from Water Property by \$360 to reconcile the discrepancy between the application and the adjusted trial balance.

(F) Salaries and Wages-Employees. In its application, Grayson District proposed to increase its Salaries and Wages-Employees Expense of \$941,731 by \$23,185²⁰ to reflect a cost of living adjustment and selected employee's merit increase

¹⁹ *Id.*, Exhibit C, Statement of Adjusted Operations.

²⁰ *Id.*, Adjustment E.

upon reaching their anniversary date of employment. Staff reviewed Grayson District's Salaries and Wages-Employees for the test year and determined that for a normalized test year of 2,080 regular hours for full time employees, reflecting the current employee pay rates,²¹ which include the most recent cost of living adjustments and merit increases, the Salaries and Wages-Employees expense is \$931,344 as shown below. Therefore, Staff reduced Salaries and Wages Expense by \$10,387.

Employee Position	Total Hours	Annualized Hours	Current Wages Rates	Pro Forma Normal Wages	Test Year Overtime Hours	Current Overtime Wage Rates	Pro Forma Overtime Wages	Total Pro Forma Wages
Seasonal Part-Time Employee	90.25	90	11.00	993	-	16.50	-	993
Cashier	2,080.00	2,080	16.60	34,528	-	24.90	-	34,528
Customer Service Rep	2,080.00	2,080	28.06	58,365	-	42.09	-	58,365
Director of Finance and Administration	2,080.00	2,080	1,636.48/ week	85,097	-	-	-	85,097
Meter Reader	2,193.00	2,080	21.01	43,701	113.00	31.52	3,561.20	47,262
Water Quality Tech	2,205.00	2,080	25.33	52,686	125.00	38.00	4,749.38	57,436
Water Quality/ Metering Coordinator	2,234.00	2,080	31.40	65,312	154.00	47.10	7,253.40	72,565
Distribution Laborer	2,254.50	2,080	19.66	40,893	174.50	29.49	5,146.01	46,039
Distribution Operator	2,257.50	2,080	23.35	48,568	177.50	35.03	7,881	56,449
Service Technician	2,305.00	2,080	30.91	64,293	225	46.37	4,915	69,207
Distribution Supervisor	2,186.00	2,080	31.40	65,312	106	47.10	6,924	72,236
Water Treatment Plant Operator	2,227.00	2,080	26.97	56,098	147	40.46	2,953	59,051
Water Treatment Plant Lead Operator	2,153.00	2,080	29.25	60,840	73	43.88	2,940	63,780
Water Treatment Plant Chief Operator	2,147.00	2,080	36.48	75,878	67	54.72	-	75,878
Manager	2,080.00	2,080	2,547.29/ Week	132,459	-	-	-	132,459
Total Pro Forma Wages								931,344
Less: Test Year Wages w/ adjustment								(941,731)
Pro Forma Adjustment								\$ (10,387)

(G) Expenses Related to Meter Installations. Grayson District proposed an adjustment to reduce Salaries and Wages-Employee Labor expense by \$24,451²² to reflect the removal of labor costs associated with 76 new water connections.²³ The Uniform System of Accounts for Class A/B Water Systems (USoA) requires that these

²¹ *Id.*, Exhibit O, Employee Wages/Salaries' and Hours Worked table.

²² *Id.*, Exhibit C, Statement of Adjusted Operations, Adjustment E.

²³ *Id.*

costs be capitalized as Utility Plant in Service and depreciated over their estimated useful lives.²⁴ During the test year, Grayson District did not capitalize the expenses for the tap installations and incorrectly reported these costs as test-year expenses. To correct this accounting error in pro forma operations, Grayson District proposed to remove the amount collected for these connections from test-year expenses. Staff agrees with Grayson District's proposed decrease to Salaries and Wages-Employees by \$24,451. In addition, Staff has capitalized the costs and made a corresponding adjustment to test-year depreciation as shown in adjustment (M).

(H) Employee Pensions and Benefits- Retirement Contribution. In its application, Grayson District proposed to increase Employee Pensions and Benefits Expense by \$8,048²⁵ to reflect a retirement contributions increase due to an increase in employee's Salaries and Wages. Utilizing the salaries and wages totals in adjustments (F) and (G) and Grayson District's contribution rates provided²⁶ Staff calculated the Employer contributions to Employee's 401K retirement plan as \$103,764. Therefore, Staff increased Employee Pensions and Benefits by \$2,130.

²⁴ USoA, Accounting Instruction 19 and 33.

²⁵ Application, Exhibit C, Schedule of Adjusted Operations, Adjustment F.

²⁶ *Id.*, Exhibit R-1, Benefits plans at 3 and 4.

Employee Number	Total Pro Forma Wages	Tier	Employee Contribution Rate	Employer Contribution Rate	Employer Contribution
Seasonal Part-Time Employee	\$ 993				
Cashier	34,528	2	3%	6%	2,071.68
Customer Service Rep	58,365	1	12%	12%	7,003.78
Director of Finance and Administration	85,097	1	6%	12%	10,211.64
Meter Reader	47,262	2	3%	6%	2,835.72
Water Quality Tech	57,436	2	3%	6%	3,446.15
Water Quality/ Metering Coordinator	72,565	1	6%	12%	8,707.85
Distribution Laborer	46,039	1	5%	10%	4,603.88
Distribution Operator	56,449	2	3%	6%	3,386.92
Service Technician	69,207	1	30%	15%	10,381.12
Distribution Supervisor	72,236	1	6%	12%	8,668.28
Water Treatment Plant Operator	59,051	2	5%	6%	3,543.05
Water Treatment Plant Lead Operator	63,780	1	7%	12%	7,653.56
Water Treatment Plant Chief Operator	75,878	1	7.50%	15%	11,381.76
Manager	<u>132,459</u>	1	11%	15%	<u>19,868.86</u>
Pro Forma Retirement Contribution					103,764
Less: Test Year Retirement Contribution					<u>(101,634)</u>
Employee Pensions and Benefits Adjustment					<u>\$ 2,130</u>

(l) Employee Pensions and Benefits-Insurance. In its application, Grayson District proposed to reduce Employee Pensions and Benefits Expense by \$43,312.²⁷ The adjustment reflects Grayson District's limit for employer's contribution to employee health and dental insurance expenses. Staff notes that the Commission has consistently made ratemaking adjustments to reduce the cost of employer-sponsored healthcare paid by some utilities when certain aspects of those benefit packages were found to be unreasonable based on a review of total salaries and fringe benefits. The Commission continues to place greater emphasis on evaluating employees' total compensation packages, including both salary and benefits programs, for market and geographic competitiveness to ensure the development of a fair, just and reasonable rate. The

²⁷ Application, Exhibit C, Schedule of Adjusted Operations, Adjustment F, health Insurance premium reduction (\$38,997) + dental insurance premium reduction (\$4,315) = \$43,312.

Commission has found that, in most cases, 100 percent of employer-funded health care does not meet those criteria.²⁸

Consistent with precedent in which the Commission has reduced benefit expenses for utilities that pay 100 percent of an employee's health insurance coverage, Staff reduced Grayson District's single health insurance premiums by 22²⁹ percent, family health insurance premiums by 34³⁰ percent, and single dental insurance premiums by 60³¹ percent as shown in the calculation below. Accordingly, Staff decreased Employee Pensions and Benefits by \$53,461.

²⁸ Case 2020-00167, *Electronic Application of Ohio County Water District for an Alternative Rate Adjustment* (Ky. PSC Dec. 2, 2020). Case 2020-00296, *Electronic Application of Allen County Water District for an Alternative Rate Adjustment*, (Ky. PSC Feb. 3, 2021).

²⁹ Bureau of Labor Statistics, Healthcare Benefits, March 2020, Table 3, private industry workers. (<https://www.bls.gov/news.release/pdf/ebs2.pdf>).

³⁰ *Id.*, Table 4, private industry workers. (<https://www.bls.gov/news.release/pdf/ebs2.pdf>).

³¹ Case 2019-00268, *Application of Knott County Water and Sewer District for an Alternative Rate Adjustment*, (Ky. PSC Mar. 24, 2020). Case 2020-00167, *Electronic Application of Ohio County Water District for an Alternative Rate Adjustment*, (Ky. PSC Mar. 5, 2021). Case 2020-00296, *Electronic Application of Allen County Water District for an Alternative Rate Adjustment*, (Ky. PSC Feb. 3, 2021).

Type of Premium	Employer Contributions	Average Employee Contribution Rate	Monthly Premium Adjustment	Pro Forma Monthly Premium
Single Health Insurance ³²	\$ 4,341	22%	\$ (955)	\$ 3,386
Family Health Insurance	14,036	34%	(4,772)	9,264
Dental Insurance	1,317	60%	(790)	527
Total Pro Forma Monthly Premium Times: 12 Months				13,177 <u>12</u>
Total Annual Pro Forma Premium Less: Test Year				158,124 <u>(211,585)</u>
Adjustment				<u>\$ (53,461)</u>

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(J) Purchased Water. In its test year, Grayson District proposed to increase purchased water expense by \$1,569³³ to reflect an increase the city of Leitchfield's cost of water sold to Grayson District. In order to annualize the purchased water, Staff calculated a Purchased Water expense using the new rate. This results in a purchased water expense of \$409,221. Therefore, Staff decreased purchased water expense by

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ID#	Employee Position	Medial Coverage	Medical Premium	Dental Coverage	Dental Premium	Total
812M88206	Distribution Laborer	EE/CH	\$ 2,435	Family	\$ 140	\$ 2,575
994M60623	Director of Finance and Administration	EE/CH	1,689	Family	140	1,829
313M73506	Cashier	EE/CH	2,435	Family	140	2,575
995M60440	Distribution Operator	EE/CH	593	Employee and Children	95	687
468M88206	Water Treatment Plant Chief Operator	EE/CH	854	Employee and Children	95	949
729M88206	Service Technician	EE/SP	1,709	Employee and Spouse	64	1,773
905M54292	Water Quality Tech	EE	854	Employee Only	32	886
873M54621	Customer Service Rep	EE/SP	1,185	Employee and Spouse	64	1,249
413M60298	Meter Reader	EE/SP	1,709	-	-	1,709
189M63374	Water Treatment Plant Lead Operator	EE	593	Family	140	733
913M88206	Manager	EE/SP	1,185	Employee and Spouse	64	1,249
100M56364	Distribution Supervisor	EE/CH	1,689	Family	140	1,829
380M89083	Water Treatment Plant Operator	EE	593	Employee and Spouse	64	656
612M54194	Water Quality/ Metering Coordinator	EE	854	Family	140	995
Total			<u>\$ 18,377</u>		<u>\$ 1,317</u>	<u>19,694</u>

³³ Application, Exhibit C, Schedule of Adjusted Operations, Adjustment G.

\$9,395 in order to reconcile the test year amount with the reported purchased amount as shown below.

City of Leitchfield			
Period	Gallons	Rate	Total
Jan-2020	12,343,100	\$ 2.375	\$ 29,315
Feb-2020	15,191,900	2.375	36,081
Mar-2020	12,540,500	2.375	29,784
Apr-2020	15,941,000	2.375	37,860
May-2020	13,811,700	2.375	32,803
Jun-2020	16,223,400	2.375	38,531
Jul-2020	14,583,800	2.375	34,637
Aug-2020	13,584,300	2.375	32,263
Sep-2020	16,533,300	2.375	39,267
Oct-2020	12,768,100	2.375	30,324
Nov-2020	13,916,100	2.375	33,051
Dec-2020	14,866,400	2.375	35,308
	Purchased Water Expense		409,221
	Test Year Purchased Water		<u>(418,616)</u>
	Adjustment		<u>\$ (9,395)</u>

(K) Purchased Water Expense. In its application, Grayson District proposed to decrease Purchased Water Expense by \$50,663³⁴ to reflect the completion of three interconnections that permit areas that were supplied previously with water from the city of Leitchfield to be supplied with water from Grayson District. This will result in a decrease of \$21,331,600 gallons purchased. Staff agrees with Grayson District's proposed decrease to Purchased Water Expense by \$50,663 as shown below.

³⁴ *Id.*

Purchased Gallons Reduction	21,331,600
Times: Purchased Water Rate per 1,000 gallon	<u>\$ 2.38</u>
Adjustment	<u>\$ 50,663</u>

(L) Purchased Power Expense. In its application, Grayson District proposed to increase Purchased Power Expense by \$8,961.³⁵ The adjustment reflects the increase in the power required at the water treatment plant to produce the additional 21,331,600 gallons of water required due to the completion of the three interconnections mentioned in adjustment (K). Upon examination, Staff agrees with Grayson District's proposed increase to Purchased Power Expense by \$8,961 as shown below.

Water Treatment Plant Purchase Power	\$ 101,602
Divide by: Total 1,000 Gallons Produced	<u>241,868</u>
Electric Cost per Gallon	<u>0.0004201</u>
Additional Gallons Produced	21,331,600
Times: Electric Cost per Gallon	<u>\$ 0.0004201</u>
Additional Purchased Power Expense	<u>\$ 8,961</u>

(M) Chemical Expense. In its application, Grayson District proposed to increase Chemicals Expense by \$4,619.³⁶ The adjustment reflects the increase in the chemicals required at the water treatment plant to produce the additional 21,331,600 gallons of water required due to the completion of the three interconnections mentioned in

³⁵ Application, Exhibit C, Schedule of Adjusted Operations, Adjustment H.

³⁶ *Id.*, Adjustment I

adjustment (K). Upon examination, staff agrees with Grayson District’s proposed increase to Chemical Expense by \$4,619 as shown below.

Water Treatment Plant Chemical	\$ 52,374
Divide by: Total 1,000 Gallons Produced	<u>241,868</u>
Electric Cost per Gallon	0.0002165
Additional Gallons Produced	21,331,600
Times: Electric Cost per Gallon	<u>\$ 0.0002165</u>
Additional Chemical Expense	<u><u>\$ 4,619</u></u>

(N) Depreciation Expense. In its application, Grayson District proposed to decrease test-year Depreciation Expense of \$859,101 by \$132,589.³⁷ This adjustment was the result of Grayson District’s proposal to adjust the lives assigned to certain assets that were outside of the life ranges in accordance with the National Association of Regulatory Utility Commissioners’ (NARUC) report titled Depreciation Practices for Small Utilities (NARUC Study) published in 1979. In addition, the adjustment involves annualized Depreciation Expense for assets that were installed subsequent to the test year.

To evaluate the reasonableness of the depreciation practices of small water utilities, the Commission has historically relied upon the NARUC Study mentioned above. When no evidence exists to support a specific life that is outside the NARUC ranges, the Commission has historically used the midpoint of the NARUC ranges to depreciate the utility plant.

³⁷ *Id.*, Adjustment J.

Staff agrees with Grayson Districts' methodology however, upon examination, found several assets whose useful lives were not adjusted to the NARUC ranges midpoints. In this proceeding, Staff found no evidence to support depreciable lives that vary significantly from the midpoint of the NARUC ranges. After further review of Grayson District's plant ledger, Staff decreased Grayson District's Depreciation Expense by \$55,113 to \$803,989 as shown below.

<u>Asset Categories</u>	<u>Test Year Depreciation Expense</u>	<u>Pro Forma Depreciation Expense</u>	<u>Adjustment</u>
Structures and Improvements	\$ 41,345	\$ 40,876	\$ (469)
Pumping Equipment	9,286	18,140	8,854
Water Treatment Equipment	158,745	224,376	65,631
Distribution Reservoirs and Standpipes	84,132	74,784	(9,348)
Transmission and Distribution Mains	388,297	248,307	(139,990)
Services	43,620	43,620	-
Meters and Meter Installations	70,747	68,484	(2,263)
Hydrant	1,699	1,359	(340)
Other Plant and MISC Equipment	10,372	32,858	22,485
Office Furniture and Equipment	18,371	7,679	(10,692)
Transportation Equipment	21,351	34,063	12,712
Tools, Shop and Garage Equipment	3,210	1,835	(1,376)
Communication Equipment	633	316	(317)
Miscellaneous Equipment	7,293	7,293	-
Phase 1 Project	-	30,777	30,777
Total	<u>\$ 859,101</u>	<u>\$ 803,989</u>	<u>\$ (55,113)</u>

(O) Depreciation-Capitalization of Test-Year Water Taps. As explained in adjustment (G) above, the expenses related to the installation of new water connections are capital expenditures that should be capitalized as Utility Plant in Service and depreciated over their estimated useful lives. Therefore, Staff calculated the annual depreciation amount for the test year and increased depreciation expense by \$575 as shown below.

Test Year Water Connections Labor Expenses	\$24,451
Divided by: Useful Life of 42.5 Years	<u>42.5</u>
Pro Forma Depreciation Adjustment	<u>\$ 575</u>

(P) Taxes Other Than Income-FICA. In its application, Grayson District proposed to increase Taxes other than Income by \$1,438³⁸ to reflect an increase to FICA taxes due to an increase in Salaries and Wages- Employees. However, as discussed in adjustment (E) and (F) above, Staff decreased Salaries and Wages- Employee by a total of \$34,838. Therefore, Staff calculated the FICA taxes and decreased Taxes Other Than Income by \$2,665 as shown below.

Pro Forma Wage Adjustment	\$ (34,838)
Times: 7.65 Percent FICA Rate	<u>7.65%</u>
FICA Adjustment	<u>\$ (2,665)</u>

(Q) Taxes Other Than Income-Public Service Commission (PSC) Assessment. In its application, Grayson District proposed to increase Taxes Other Than Income by \$637.54³⁹ to reflect an increase in PSC Assessment due to an adjustment of test year revenues. Although, Staff agrees with Grayson District’s methodology, staff calculated the operating revenues to be \$3,780,170 as shown below; as a result, the PSC Assessment is \$7,560. Staff adjusted Taxes other Than Income of \$531.

³⁸ *Id.*, Adjustment K.

³⁹ *Id.*

PSC Assessment

Total Operating Revenues	3,779,750
Times: PSC Assessment Rate	<u>0.20%</u>
Pro Forma PSC Assessment	7,560
Test Year PSC Assessment	<u>(7,029)</u>
Taxes other Than Income Adjustment	<u><u>531</u></u>

OVERALL REVENUE REQUIREMENT AND REQUIRED REVENUE INCREASE

The Commission has historically applied a DSC method to calculate the Overall Revenue Requirement of water districts and water associations. This method allows for recovery of (1) cash-related pro forma operating expenses; (2) recovery of depreciation expense, a non-cash item, to provide working capital;⁴⁰ (3) the average annual principal and interest payments on all long-term debts, and (4) working capital that is in addition to depreciation expense.

⁴⁰ The Kentucky Supreme Court has held that the Commission must permit a water district to recover its depreciation expense through its rates for service to provide internal funds for renewing and replacing assets. See *Public Serv. Comm'n of Kentucky v. Dewitt Water Dist.*, 720 S.W.2d 725, 728 (Ky. 1986). Although a water district's lenders require that a small portion of the depreciation funds be deposited annually into a debt reserve/depreciation fund until the account's balance accumulates to a required threshold, neither the Commission nor the Court requires that revenues collected for depreciation be accounted for separately from the water district's general funds or that depreciation funds be used only for asset renewal and replacement. The Commission has recognized that the working capital provided through recovery of depreciation expense may be used for purposes other than renewal and replacement of assets. See Case No. 2012-00309, *Application of Southern Water and Sewer District for an Adjustment in Rates Pursuant to the Alternative Rate Filing Procedure for Small Utilities* (Ky. PSC Dec. 21, 2012).

	Grayson County Water District	Staff	
Pro Forma Operating Expenses	\$ 3,299,270	\$3,312,469	
Plus: Average Annual Principal and Interest Payment	633,058	677,447	(1)
Debt Coverage Requirement	<u>126,612</u>	<u>135,489</u>	(2)
Total Revenue Requirement	4,058,940	4,125,405	
Less: Revenues Required to serve Caneyville	(138,913)	(128,752)	
Other Operating Revenue	(121,252)	(68,672)	
Non-Operating Revenue	(66,627)	(66,267)	
Interest Income	<u>(25,565)</u>	<u>(25,565)</u>	
Revenue Required From Water Sales	3,706,583	3,836,149	
Revenue from Retail Sales at Present Rates	<u>(3,516,060)</u>	<u>(3,644,812)</u>	
Required Revenue Increase	<u>\$ 190,523</u>	<u>\$ 191,337</u>	
Percentage Increase	5.23%	5.25%	

1. Average Annual Principal and Interest Payments. At the time of Staff's review, Grayson District had five outstanding United States Department of Agriculture, Rural Development (USDA/RD) promissory notes, as well as three loans with Kentucky Rural Water Authority (KRWA) along with one KRWA Refunding Bond, also one Kentucky Infrastructure Authority (KIA) loan. Subsequent to the test year, Grayson district received authorization for \$568,000 in additional Waterworks Revenue Bonds.⁴¹ In its application, Grayson District requested recovery of the average annual principal and interest on its indebtedness based on a five-year average of the annual principal, and interest and fee payments for the years 2022 through 2026.⁴² Staff agrees with the methodology Grayson District proposes. As shown in Appendix B, Staff calculated an Average Principal and Interest

⁴¹ Case 2021-00152, *Electronic Application of Grayson County Water District for a Certificate of Public Convenience and Necessity to Construct a System Improvements Project and an Order Authorizing the Issuance of Securities Pursuant to KRS 278.023*, (Ky. PSC May 29, 2021).

⁴² Application, Exhibit D.

Payment of \$677,447.

2. Additional Working Capital. The DSC method, as historically applied by the Commission, includes an allowance for additional working capital that is equal to the minimum net revenues required by a district's lenders that are above its average annual debt payments. In its application, Grayson District requested recovery of an allowance for working capital that is equal to 120 percent of its average annual debt payments for its bonds payable to the USDA/RD, the KIA, and Kentucky Rural Water Finance Corporation at the time of its application.

USDA/RD requires that Grayson District charge rates that produce net revenues that are at least 120 percent of its average annual debt payments. Following the Commission's historic practice, Staff agrees with Grayson District's revised methodology. Therefore, \$135,489 is included in the revenue requirement.

Average Annual Principal and Interest	\$	677,447
Times: DSC Coverage Ratio		<u>120%</u>
Total Net Revenues Required		812,936
Less: Average Annual Principal and Interest Payments		<u>(677,447)</u>
Additional Working Capital	\$	<u><u>135,489</u></u>

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Signatures

/s/ William Foley

Prepared by: William Foley
Revenue Requirements Branch
Division of Financial Analysis



Prepared by: Jason Green
Rate Design Branch
Division of Financial Analysis

APPENDIX A

APPENDIX TO A STAFF REPORT OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2021-00191 DATED OCT 06 2021

Monthly Water Rates

5/8-inch Meter

First	1,500 Gallons	\$20.37 Minimum Bill
Next	8,500 Gallons	0.00955 Per Gallon
Next	40,000 Gallons	0.00858 Per Gallon
Next	100,000 Gallons	0.00761 Per Gallon
Over	150,000 Gallons	0.00667 Per Gallon

3/4-inch Meter

First	3,000 Gallons	\$34.68 Minimum Bill
Next	7,000 Gallons	0.00955 Per Gallon
Next	40,000 Gallons	0.00858 Per Gallon
Next	100,000 Gallons	0.00761 Per Gallon
Over	150,000 Gallons	0.00667 Per Gallon

1-inch Meter

First	5,000 Gallons	\$53.78 Minimum Bill
Next	5,000 Gallons	0.00955 Per Gallon
Next	40,000 Gallons	0.00858 Per Gallon
Next	100,000 Gallons	0.00761 Per Gallon
Over	150,000 Gallons	0.00667 Per Gallon

1 1/2-inch Meter

First	10,000 Gallons	\$101.51 Minimum Bill
Next	40,000 Gallons	0.00858 Per Gallon
Next	100,000 Gallons	0.00761 Per Gallon
Over	150,000 Gallons	0.00667 Per Gallon

2-inch Meter

First	16,000 Gallons	\$152.98 Minimum Bill
Next	34,000 Gallons	0.00858 Per Gallon
Next	100,000 Gallons	0.00761 Per Gallon
Over	150,000 Gallons	0.00667 Per Gallon

3-inch Meter

First	30,000 Gallons	\$273.07 Minimum Bill
Next	20,000 Gallons	0.00858 Per Gallon
Next	100,000 Gallons	0.00761 Per Gallon
Over	150,000 Gallons	0.00667 Per Gallon

4-inch Meter

First 50,000 Gallons	\$444.63 Minimum Bill
Next 100,000 Gallons	0.00761 Per Gallon
Over 150,000 Gallons	0.00667 Per Gallon

6-inch Meter

First 100,000 Gallons	\$825.11 Minimum Bill
Next 50,000 Gallons	0.00761 Per Gallon
Over 150,000 Gallons	0.00667 Per Gallon

8-inch Meter

First 150,000 Gallons	\$1,205.59 Minimum Bill
Over 150,000 Gallons	0.00667 Per Gallon

10-inch Meter

First 250,000 Gallons	\$1,872.87 Minimum Bill
Over 250,000 Gallons	0.00667 Per Gallon

Nonrecurring Charges

Connection Fee	\$15.00
Turn-On Charge	\$15.00
Turn-On Charge (After Hours)	\$113.00
Meter Re-read Charge	\$15.00
Meter Re-read Charge (After Hours)	\$113.00
Meter Test Charge	\$15.00
Reconnection Fee	\$30.00
Reconnection Fee (After Hours)	\$170.00
Service Call/Investigation	\$15.00
Service Call/Investigation (After Hours)	\$113.00
Service Line Investigation	\$15.00
Meter Tampering Charge	\$60.00
Returned Check Charge	\$10.00

APPENDIX B

APPENDIX TO A STAFF REPORT OF THE KENTUCKY PUBLIC SERVICE COMMISSION
IN CASE NO. 2021-00191 DATED OCT 06 2021

2022-2026 Five-Year Average of Debt Payments

Year	USDA Debt											
	Series 2013 ¹		Series 2013 ²		Series 2018 ³		Series 2020A ⁴		Series 2020B ⁵		2021-00152 bond ⁶	
	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest
2022	\$ 10,000	\$ 9,690	\$ 18,500	\$15,435	\$ 12,000	\$16,800	\$ 9,500	\$ 9,183	\$ 4,500	\$4,362	\$ 10,500	\$8,442
2023	10,500	9,472	19,000	15,060	12,000	16,500	10,000	9,013	4,500	4,283	10,500	8,284
2024	10,500	19,000	19,000	14,680	12,500	16,194	10,000	8,838	4,500	4,205	10,500	8,149
2025	11,000	19,500	19,500	14,295	13,000	15,875	10,000	8,663	5,000	4,122	11,000	7,966
2026	11,000	20,021	20,000	13,900	13,000	15,550	10,500	8,484	5,000	4,034	11,000	7,801
Totals	53,000	77,683	96,000	73,370	62,500	80,919	50,000	44,181	23,500	21,006	53,500	40,642

Year	KRWA						KIA Loan ¹⁰		
	Series 2012 D ⁷		Series 2013 B ⁸		Series 2019 B ⁹		Principal	Interest	Total
	Principal	Interest	Principal	Interest	Principal	Interest			
2022	\$ 160,000	\$83,802	\$ 140,000	\$22,622	\$ 40,701	\$ -	\$ 231,778	\$3,134	\$ 810,949
2023	165,000	78,844	140,000	18,702	40,701	140,000			712,359.40
2024	170,000	73,566	145,000	14,621	38,143	-			579,395.95
2025	175,000	67,827	145,000	10,289	38,143	145,000			721,179.68
2026	185,000	61,617	135,000	6,019	35,423	-			563,348.67
Totals	855,000	365,656	705,000	72,253	193,111	285,000	231,778	3,134	676,301

Divide by: 5 years	<u>5</u>
Average Annual Principal and Interest Payment	<u>135,260</u>
Average Coverage on Long Term Debt	<u><u>27,052</u></u>

¹ Case 2012-00198, *Application of the Grayson County Water District for a Certificate of Public Convenience and Necessity to Construct, Finance and Increase Rates Pursuant To KRS 278.023*, (Ky. PSC June 14, 2012).

² *Id.*

³ Case 2017-00247, *Application of the Grayson County Water District for a Certificate of Public Convenience and Necessity to Construct and Finance a Project Pursuant To KRS 278.023*, (Ky. PSC July 14, 2017).

⁴ Case 2020-00152, *Electronic Application Of The Grayson County Water District For A Certificate Of Public Convenience And Necessity To Construct A System Improvements Project And An Order Approving A Change In Rates And Authorizing The Issuance Of Securities Pursuant to KRS 278.023*, (Ky. PSC July 22, 2021).

⁵ *Id.*

⁶ Case 2021-00152, *Electronic Application of Grayson County Water District for a Certificate of Public Convenience and Necessity to Construct a System Improvements Project and an Order Authorizing the Issuance of Securities Pursuant to KRS 278.023*, (Ky. PSC May 29, 2021).

⁷ Case 2012-00147, *Application of Grayson County Water District to Issue Securities in the Approximate Principal Amount of \$3,700,000 for the Purpose of Refunding Certain Outstanding Revenue Bonds of the District Pursuant to the Provisions of KRS 278.300 and 807 KAR 5:001*, (Ky. PSC May 21, 2012).

⁸ Case 2013-00042, *Kentucky Rural Water Finance Corporation Joint Application on Behalf of Certain Water Districts for Authority to Borrow Funds to Refinance Certain Outstanding Indebtedness to the Kentucky Rural Water Finance Corporation*, (Ky. PSC Mar., 27, 2013).

⁹ Case 2019-00190, *Application of Grayson County Water District To Issue Securities in the Approximate Principal Amount of \$1,170,000 for the Purpose of Refunding Certain Outstanding Revenue Bonds of The District Pursuant to the Provisions of KRS 278.300 and 807 KAR 5:001*, (Ky. PSC July, 31, 2019).

¹⁰ Case 2001-00067, *Application of Grayson County Water District, Inc. of Leitchfield, Ky. for (1) Certificate of Public Convenience and Necessity (2) Approval of the Proposed Plan of Financing Said Project*, (Ky. PSC May 31, 2001).

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